



# House of Representatives

## File No. 588

General Assembly

February Session, 2002

**(Reprint of File No. 206)**

Substitute House Bill No. 5209  
As Amended by House  
Amendment Schedule "A"

Approved by the Legislative Commissioner  
April 27, 2002

### **AN ACT CONCERNING REDUCING SULFUR DIOXIDE EMISSIONS AT POWER PLANTS.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1       Section 1. (NEW) (*Effective January 1, 2005*) For purposes of this  
2       section, section 2 of this act and subsection (a) of section 16-245l of the  
3       general statutes, as amended by this act:

4       (1) "Affected unit" means any emissions unit subject to the  
5       provisions of the Post-2002 Nitrogen Oxides Budget Program, as  
6       described in the regulations adopted under section 22a-174 of the  
7       general statutes.

8       (2) "Average emissions rate" means a determination of the rate of  
9       SO<sub>2</sub> emissions, measured in pounds of SO<sub>2</sub> per MMBtu, in any  
10      calendar quarter from either a single affected unit or from two or more  
11      affected units. Average emissions rate for a single unit is calculated by  
12      dividing the total quarterly SO<sub>2</sub> emissions, in pounds, from such unit  
13      by the total quarterly heat input, in MMBtu, for such unit. Average  
14      emissions rate for two or more units is calculated by dividing the total

15 quarterly SO<sub>2</sub> emissions, in pounds, from all such units by the total  
16 quarterly heat input, in MMBtu, for all such units.

17 (3) "Calendar quarter" means the period of January first to March  
18 thirty-first, inclusive, April first to June thirtieth, inclusive, July first to  
19 September thirtieth, inclusive, or October first to December thirty-first,  
20 inclusive.

21 (4) "MMBtu" means million BTU of heat input.

22 (5) "Sulfur dioxide" or "SO<sub>2</sub>" means a gas that at standard conditions  
23 has the molecular form SO<sub>2</sub>.

24 (6) "Sulfur Dioxide Discrete Emission Reduction Credit" or "SO<sub>2</sub>  
25 DERC" means the reduction of one ton of sulfur dioxide at a stationary  
26 source during the generation period, which the commissioner has  
27 certified in writing as real, quantifiable, surplus, permanent and  
28 enforceable. Early reduction credits shall qualify as SO<sub>2</sub> DERCS.

29 (7) "Early reduction credit" means a reduction of SO<sub>2</sub> during  
30 calendar years 1999, 2000, 2001 or 2002 below the most stringent SO<sub>2</sub>  
31 emission rate applicable to an affected unit.

32 (8) "Title IV SO<sub>2</sub> allowance" or "SO<sub>2</sub> allowance" means an  
33 authorization allocated to a Title IV source by the Administrator,  
34 pursuant to Title IV of the federal Clean Air Act, 42 USC 7651d et seq.  
35 and 40 CFR 72, 73, to emit up to one ton of SO<sub>2</sub> during or after a  
36 specified calendar year.

37 (9) "Title IV source" means an affected unit that is also subject to  
38 Phase II of the acid rain control requirements set forth in Title IV of the  
39 federal Clean Air Act, 42 USC 7651d et seq.

40 Sec. 2. (NEW) (*Effective January 1, 2005*) (a) On and after January 1,  
41 2005, the owner or operator of a Title IV source that is also an affected  
42 unit or units shall:

43 (1) Combust liquid fuel, gaseous fuel, solid fuel or a combination of

44 each provided that each fuel possesses a fuel sulfur limit of equal to or  
45 less than 0.3 per cent sulfur, by weight (dry basis); or

46 (2) Meet an average emission rate of equal to or less than 0.33  
47 pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit  
48 at the premises; or

49 (3) Meet an average emission rate of equal to or less than 0.3 pounds  
50 SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or  
51 operator averages the emissions from two or more affected units at the  
52 premises.

53 (b) On and after January 1, 2005, no owner or operator of a Title IV  
54 source that is also an affected unit or units may use SO<sub>2</sub> DERCs or SO<sub>2</sub>  
55 allowances to comply with the requirements of subsection (a) of this  
56 section except if the Commissioner of Environmental Protection  
57 requires the owner or operator of an affected unit or units using a low-  
58 sulfur fuel to comply with subdivision (1) of subsection (a) of this  
59 section to offset excess SO<sub>2</sub> emissions that were emitted during a  
60 suspension period, as described in subsection (c) of this section,  
61 through the purchase or retirement of such SO<sub>2</sub> DERCs or SO<sub>2</sub>  
62 allowances.

63 (c) The Commissioner of Environmental Protection may suspend  
64 the requirements of subdivision (1) of subsection (a) of this section for  
65 the owner or operator of any affected unit using a low-sulfur fuel,  
66 including a low-sulfur solid fuel. Such suspension shall be made only  
67 when the commissioner finds that the availability of fuel that complies  
68 with such requirements is inadequate to meet the needs of residential,  
69 commercial and industrial users in this state and that such inadequate  
70 supply constitutes an emergency, provided such suspension shall not  
71 exceed the period that the inadequate supply constitutes an  
72 emergency. Any such suspension by the commissioner shall not  
73 suspend or alter the sulfur dioxide average emission rate requirements  
74 that are in effect as of the date of passage of this act. The Commissioner  
75 of Environmental Protection shall specify in writing the period of time

76 that such suspension shall be in effect and shall provide notice of such  
77 suspension to the joint standing committees of the General Assembly  
78 having cognizance of matters relating to the environment and energy  
79 and technology. No later than thirty days after the termination of such  
80 suspension, the owner or operator of an affected unit or units shall  
81 report to the commissioner, in writing, the amount of SO<sub>2</sub> emissions in  
82 excess of those that would have occurred if the use of compliant fuel at  
83 such affected unit or units had not been interrupted. If such excess SO<sub>2</sub>  
84 emissions from any premises exceed fifty tons, the commissioner shall  
85 require that the owner or operator of such affected unit or units offset  
86 such SO<sub>2</sub> emissions through the purchase or retirement of SO<sub>2</sub> DERCS  
87 or SO<sub>2</sub> allowances.

88 (d) The provisions of subsections (c) and (f) of this section, when  
89 implemented by the Commissioner of Environmental Protection, shall  
90 not suspend any underlying procedures or requirements in the  
91 Regulations of Connecticut State Agencies adopted by the Department  
92 of Environmental Protection pertaining to SO<sub>2</sub> emissions.

93 (e) No provision of section 1 of this act, this section or subsection (a)  
94 of section 16-245l of the general statutes, as amended by this act, shall  
95 be construed to prohibit the Commissioner of Environmental  
96 Protection from waiving or suspending any applicable sulfur dioxide  
97 emissions standard as may be allowed under current federal or state  
98 laws or regulations, or other permit limits of a must run Title IV  
99 source, as ordered by the Independent System Operator, as may be  
100 allowed under current federal or state laws or regulations. The  
101 commissioner may attach any conditions to such suspension or waiver,  
102 as the commissioner deems necessary to mitigate any adverse  
103 environmental or public health impacts.

104 (f) The Commissioner of Environmental Protection, in consultation  
105 with the chairman of the Public Utilities Control Authority, may  
106 suspend the prohibition of subsection (b) of this section for a Title IV  
107 source if it is determined that the application of the prohibition  
108 established under subsection (b) of this section adversely affects the

109 ability to meet the reliability standards, as defined by the New  
110 England Power Pool or its successor organization, and the suspension  
111 thereof is intended to mitigate such reliability problems. The  
112 Commissioner of Environmental Protection, in consultation with the  
113 chairman of the Public Utilities Control Authority, shall specify in  
114 writing the reasons for such suspension and the period of time that  
115 such suspension shall be in effect and shall provide notice of such  
116 suspension at the time of issuance, or the next business day, to the joint  
117 standing committees of the General Assembly having cognizance of  
118 matters relating to the environment and energy and technology. No  
119 such waiver shall last more than thirty days. The commissioner may  
120 reissue additional waivers for such source after said initial waiver has  
121 expired. Within ten days of receipt of the commissioner's notice of  
122 suspension, the committees having cognizance of matters relating to  
123 the environment and energy and technology may hold a joint public  
124 hearing and meeting of the committees to either modify or reject the  
125 commissioner's suspension by a majority vote. If the committees do  
126 not meet, the commissioner's suspension shall be deemed approved.

127 Sec. 3. Subsection (a) of section 16-245l of the general statutes is  
128 repealed and the following is substituted in lieu thereof (*Effective*  
129 *January 1, 2004*):

130 (a) The Department of Public Utility Control shall establish and each  
131 electric distribution company shall collect a systems benefits charge to  
132 be imposed against all end use customers of each electric distribution  
133 company beginning January 1, 2000. The department shall hold a  
134 hearing that shall be conducted as a contested case in accordance with  
135 chapter 54 to establish the amount of the systems benefits charge. The  
136 department may revise the systems benefits charge or any element of  
137 said charge as the need arises. The systems benefits charge shall be  
138 used to fund (1) the expenses of the public education outreach  
139 program developed under subsection (a) of section 16-244d other than  
140 expenses for department staff, (2) the reasonable and proper expenses  
141 of the education outreach consultant pursuant to subsection (d) of  
142 section 16-244d, as amended, (3) the cost of hardship protection

143 measures under sections 16-262c and 16-262d and other hardship  
144 protections, including but not limited to, electric service bill payment  
145 programs, funding and technical support for energy assistance, fuel  
146 bank and weatherization programs and weatherization services, (4) the  
147 payment program to offset tax losses described in section 12-94d, as  
148 amended, (5) any sums paid to a resource recovery authority pursuant  
149 to subsection (b) of section 16-243e, (6) low income conservation  
150 programs approved by the Department of Public Utility Control, (7)  
151 displaced worker protection costs, (8) unfunded storage and disposal  
152 costs for spent nuclear fuel generated before January 1, 2000, approved  
153 by the appropriate regulatory agencies, (9) postretirement safe  
154 shutdown and site protection costs that are incurred in preparation for  
155 decommissioning, (10) decommissioning fund contributions, and (11)  
156 legal, appraisal and purchase costs of a conservation or land use  
157 restriction and other related costs as the department in its discretion  
158 deems appropriate, incurred by a municipality on or before January 1,  
159 2000, to ensure the environmental, recreational and scenic preservation  
160 of any reservoir located within this state created by a pump storage  
161 hydroelectric generating facility. As used in this subsection, "displaced  
162 worker protection costs" means the reasonable costs incurred, prior to  
163 January 1, [2006] 2008, by an electric supplier, exempt wholesale  
164 generator, electric company or a generation entity or affiliate arising  
165 from the dislocation of any employee other than an officer, provided  
166 such dislocation is a result of restructuring of (A) the electric  
167 generation market and such dislocation occurs on or after July 1, 1998,  
168 or (B) the closing of a Title IV source or an exempt wholesale  
169 generator, as defined in 15 USC 79z-5a, on or after January 1, 2004, as a  
170 result of such source's failure to meet requirements imposed as a result  
171 of sections 1 and 2 of this act and this section or those Regulations of  
172 Connecticut State Agencies adopted by the Department of  
173 Environmental Protection, as amended from time to time, in  
174 accordance with Executive Order Number 19, issued on May 17, 2000;  
175 and provided further such costs result from either the execution of  
176 agreements reached through collective bargaining for union  
177 employees or from the company's or entity's or affiliate's programs

178 and policies for nonunion employees. "Displaced worker protection  
179 costs" includes costs incurred or projected for severance, retraining,  
180 early retirement, outplacement and related expenses. "Displaced  
181 worker protection costs" does not include those costs included in  
182 determining a tax credit pursuant to section 12-217bb.

This act shall take effect as follows:	
Section 1	<i>January 1, 2005</i>
Sec. 2	<i>January 1, 2005</i>
Sec. 3	<i>January 1, 2004</i>

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

### **OFA Fiscal Note**

#### **State Impact:**

<b>Fund-Type</b>	<b>Agency Affected</b>
GF - Potential Cost	Department of Environmental Protection, Department of Public Utility Control, Legislative Management, Various

Note: GF=General Fund

#### **Municipal Impact:**

<b>Effect</b>	<b>Municipalities</b>
Potential Cost	Various

### **Explanation**

It is anticipated that based on the specifications in the bill, 12 boilers at 6 facilities would need to limit emissions by reducing actual emissions on or after January 1, 2005. Eliminating the ability to use credit trading limits the flexibility of the sources and is estimated to increase compliance costs. Due to the elimination of the emissions trading provisions, and depending upon the compliance methodology adopted by the source, it could increase costs for power in the millions of dollars above the costs associated with the current regulations. Such costs could be passed on to the users including the state and municipalities. The exact impact is indeterminate at this time.

Any additional activity resulting from the suspension and waiver duties can be handled within the routine administrative duties of both the Departments of Environmental Protection and Public Utilities Control.

To the extent that members of the Environment and Energy and Technology Committees will have to meet to modify or reject the commissioner's suspension, the Joint Committee on Legislative



Management will incur a minimal cost. A total cost of less than \$5,000 may result from mileage reimbursement to legislators in traveling to and from a meeting. Legislators are currently reimbursed 36 1/2 cents per mile. Considering that legislators may be traveling to and from the capitol on other legislative business, any additional cost due to an increased number of reimbursed trips could be handled within the anticipated budgetary resources of the department.

In addition, there could be a minimal cost for the state and municipalities associated with an increase in the system's benefit charge on electric customers to cover additional displaced worker costs due to the closing of a Title IV source or an exempt wholesale generator.

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**OLR Amended Bill Analysis**

sHB 5209 (as amended by House "A")\*

***AN ACT CONCERNING REDUCING SULFUR DIOXIDE EMISSIONS  
AT POWER PLANTS*****SUMMARY:**

This bill limits, as of January 1, 2005, the use of emissions credit trading as a means of meeting Department of Environmental Protection (DEP) regulatory standards for sulfur dioxide emissions from older power plants. It allows trading only when (1) the DEP commissioner orders its use to offset excess emissions when he suspends the standards due to a shortage of low-sulfur fuel or (2) the restriction threatens the reliability of electricity supply. The bill specifies that these provisions do not suspend any underlying procedures or requirements of DEP regulations regarding sulfur dioxide emissions.

The bill also codifies with several changes, as of January 1, 2005, (1) the emissions standards that go into effect, under the regulations, on January 1, 2003 and (2) the provisions that allow the commissioner to suspend these standards.

The bill specifies that its provisions do not impair the commissioner's ability to waive, with regard to a "must-run" plant, any sulfur dioxide emissions limit or other permit limits, as may be permitted under current state or federal law. A "must-run" plant is one ordered to run by the Independent System Operator (ISO) which, administers the New England power grid. ISO normally uses the least expensive plants available to meet power demands, but sometimes orders more expensive plants located in areas with limited generation or transmission to run in order to ensure system reliability. The bill allows the commissioner to attach conditions on such a waiver he considers necessary to mitigate any adverse environmental or public health impacts.

The bill broadens a provision that covers, with a charge imposed on

electric bills, certain costs associated with the dislocation of employees as a result of restructuring the electric industry.

EFFECTIVE DATE: January 1, 2004 for the dislocated employee provisions and January 1, 2005 for the emissions provisions.

\*House Amendment "A" (1) delays the effective date on the restriction on the use of credit trading from January 1, 2004 to January 1, 2005; (2) specifies that the bill does not supersede the regulations until the restriction goes into effect, (3) allows the use of trading to address threats to electric reliability, (4) makes several changes in the emissions standard and suspension provisions, (5) adds the provisions regarding the cap on total emissions and (6) adds the dislocated employees provisions.

## **EMISSIONS STANDARDS**

The regulations and the bill cover plants that are subject to the acid rain provisions of the federal Clean Air Act and DEP regulations regarding nitrogen oxides. These are Bridgeport Harbor, Devon, Middletown, Montville, New Haven Harbor, and Norwalk Harbor. The regulations were adopted pursuant to Executive Order 19.

Under the regulations, the owner or operators of each of these plants currently must:

1. burn liquid or gaseous fuel that has a sulfur content of no more than 0.5% sulfur by weight;
2. meet an average emissions rate of no more than 0.55 pounds of sulfur dioxide per million British Thermal Units (mmBTUs) for a unit of the plant (most of the plants consists of several units); or
3. meet an average emissions rate of no more than 0.5 pounds of sulfur dioxide per mmBTU, if the owner or operator averages the emissions from two or more units on the same premises.

This analysis refers to the above as the 0.5% standard.

Under the regulations that are scheduled to become effective, as of January 1, 2003 the owner or operator must:

1. burn liquid or gaseous fuel that has a sulfur content of no more than 0.3% sulfur by weight;

2. meet an average emission rate of no more than 0.33 pounds of sulfur dioxide per mmBTUs for a unit of the plant; or
3. meet an average emissions rate of no more than 0.3 pounds of sulfur dioxide per mmBTU, if the owner or operator averages the emissions from two or more units on the same premises.

This analysis refers to the above as the 0.3% standard. The bill allows plant owners to also meet this standard by burning solid fuel (e.g., coal) that has a sulfur content of no more than 0.3% sulfur by weight.

The regulations also currently allow the owner or operator to meet the difference in emissions between those allowed under the 0.5% and 0.3% standards by emissions credit trading. The bill limits the use of credit trading, as discussed below.

### **SUSPENSION OF STANDARDS**

The regulations allow the DEP commissioner to temporarily suspend the standards as they apply to a unit that burns low-sulfur fuel if the commissioner finds that (1) the availability of fuel that meets the standards is inadequate to meet the needs of the state's residential, commercial, and industrial users and (2) this unavailability constitutes an emergency. The commissioner must specify in writing the length of time that the suspension will be in effect. Within 30 days after the end of the suspension period, the unit owner must report to the commissioner, in writing, the amount of its sulfur dioxide emissions above the amount that would have been emitted if the suspension had not gone into effect.

The bill codifies these provisions as of January 1, 2005, and extends them to units that burn low-sulfur solid fuel such as coal. It specifies that the suspension period can be no longer than the period in which the inadequate supply of compliant fuel constitutes an emergency. The bill requires the commissioner to notify the Environment and Energy and Technology committees of the suspension.

### **EMISSIONS CREDIT TRADING**

The regulations allow plant owners to meet the difference between the 0.5% and 0.3% standards by emissions credit trading. Two types of credits can be used under this provision. EPA allocates one type, sulfur dioxide allowances, to pollution sources regulated under the federal

acid rain program. An allowance permits a source to emit up to one ton of sulfur dioxide during or after a specified calendar year.

The second type of credit is called a discrete emission reduction credit (DERC). The DEP commissioner grants a DERC for a one-ton reduction in sulfur dioxide emissions by a stationary source. To do so, he must certify in writing that the reduction is real, quantifiable, surplus (i.e., greater than required by law), permanent, and enforceable. Emission reductions at power plants in the years 1999 through 2002 are eligible for DERCs if the plant reduced its emissions below the most stringent sulfur dioxide rate applicable to the plant. Under the regulations, DERCs can be traded on a one-for-one basis, while four allowances must be traded to offset one ton of emissions at a power plant.

### **RESTRICTIONS ON USE OF TRADING**

The bill prohibits the use of trading starting January 1, 2005 except under two circumstance. Under the first, it permits the use of sulfur dioxide allowances or DERCs to meet the standards when the commissioner requires a plant owner or operator to use credit trading to offset excess emissions created during a suspension period. Under the regulations, the commissioner may require the unit owner to offset excess emissions resulting from a suspension through trading, if the excess is more than 50 tons. The bill instead requires him to order such an offset.

The second circumstance allows the commissioner, in consultation with the chairperson of the Department of Public Utility Control, to permit trading if (1) the trading restriction harms the ability to meet electric reliability standards set by the New England Power Pool or its successor organization and (2) the trading authorization is intended to mitigate this problem. The commissioner, in consultation with the chairperson, must (1) specify in writing the reasons for permitting trading and how long it will be permitted and (2) notify, by the next business day, the Environment and Energy and Technology committees of the authorization. The authorization can last for no more than 30 days, but the commissioner may issue additional authorizations. The committees may hold a joint public hearing within 10 days of receiving the notice, and modify or reject the authorization by majority vote. If the committees do not meet, the authorization is considered approved.

## **DISLOCATED EMPLOYEES**

By law, the systems benefits charge (SBC) on consumers' electric bills covers various public policy costs associated with the electric power industry. Under current law, these include costs incurred before January 1, 2006 by an electric company or its generation affiliate from the dislocation of its employees (other than officers) as a result of the restructuring of the electric generation, so long as the dislocation occurred before July 1, 1998.

The bill expands the costs by:

1. delaying the date by which costs must be incurred to January 1, 2008;
2. allowing the SBC to be used to cover dislocated employee costs incurred by exempt wholesale generators (EWG) e.g., the companies that own the plants affected by the bill's other provisions, and competitive electric retail suppliers; and
3. allowing the SBC to be used for costs arising from the closure, on or after January 1, 2004, of a plant or EWG as the result of not meeting the emissions standards of the bill or the DEP regulations.

By law, the SBC can be used to cover costs incurred or projected for severance payments, retraining, early retirement, outplacement, and related expenses.

## **BACKGROUND**

### ***Related Bill***

sHB 5315, "An Act Concerning Mercury Emissions from Power Plants," (File 221) reported favorably by the Environment, Energy and echnology, and Appropriations committees, requires power plants that burn solid fuel to reduce their mercury emission by 90% from the 2000 levels by January 1, 2007. It requires DEP to adopt implementing regulations.

### ***Legislative History***

On the House referred the original bill (File 206) to the Appropriations and Energy and Technology committees, on April 3 and 12,

respectively. The committees reported favorably on April 9 and 16, respectively.

**COMMITTEE ACTION**

## Environment Committee

Joint Favorable Substitute

Yea 18      Nay 6

## Appropriations Committee

Joint Favorable Report

Yea 43      Nay 7

## Energy and Technology Committee

Joint Favorable Report

Yea 11      Nay 4